

REMARKS

I. Introduction

Applicant adds new claims 13-17. Therefore, by this Amendment, claims 1-17 are pending in the application. Claims 1-12 have been examined and are rejected. Specifically, claims 1-10 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Publication No. 2003/0191970 to Devine et al. (hereinafter “Devine”) in view of U.S. Patent No. 6,738,975 to Yee et al. (hereinafter “Yee”); and claims 11-12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yee in view of U.S. Patent No. 6,094,688 to Mellen-Garnett et al. (hereinafter “Mellen-Garnett”).

Furthermore, claims 11-12 are rejected under 35 U.S.C. § 101 as allegedly lacking utility. Further still, claims 1-10 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

By way of overview, Applicant overcomes the rejections of claim 11-12 under § 101; the rejections of claims 1-10 under § 112, second paragraph; and the rejections of claims 1-12 under § 103(a) as follows.

II. Double Patenting Rejections

With respect to the present application, the Examiner alleges six grounds of double patenting, as set forth on pages 2-6 of the Office Action, based on U.S. Application Nos. 09/849,190 (now U.S. Patent No. 6,775,680); 09/849,377; 09/849,563; 09/849,813; 09/849,816

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and 10/310,343, respectively. Applicant submits herewith a Terminal Disclaimer to overcome each of these alleged grounds of double patenting.

III. Claim Rejections -- 35 U.S.C. § 101

As noted above, claims 11-12 stand rejected under § 101 as allegedly being inoperative and therefore lacking utility (Office Action: pages 6-7). As an initial matter, Applicant amends claim 11 to further clarify that the recited storage medium is a computer-readable storage medium.

The Examiner alleges that claim 11 “claims a product only without any function and use and the purpose of the product” (Office Action: page 7). To the contrary, claim 11 is directed to a program product comprising a computer-readable storage medium having, *inter alia*, computer instructions stored thereon. These computer instructions are for the useful purpose of “building a metamodel data repository of source and target language metamodel data.” Thus, claim 11 clearly satisfies the utility requirement of § 101.

Furthermore, the Examiner fails to provide any evidence in support of the allegation that the program product recited in claim 11 is inoperative. Indeed, it is respectfully submitted that the program product of claim 11 is operative.

IV. Claim Rejections -- 35 U.S.C. § 112, Second Paragraph

As noted above, claims 1-10 stand rejected under § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention (Office Action: pages 7-8).

It is respectfully submitted that the amendments to claims 1, 5 and 8, which correct the antecedent basis and other issues identified by the Examiner, overcome the § 112, second paragraph, rejections of claims 1-10.

V. Claim Rejections – 35 U.S.C. § 103(a)

A. Claims 1-10

As noted above, claims 1-10 stand rejected under § 103(a) as allegedly being unpatentable over Devine in view of Yee.

Claim 1 recites, *inter alia*, that “the end user application and the application server have at least one connector therebetween,” for “(i) converting the application request from the first language of the first end user application as a source language to the second language running on the application server as a target language, and (ii) converting the response to the application request from the second language running on the application server as a source language to the first language of the first end user application as a target language.” In claim 1, the connector performs each of these conversions by: “1) invoking connector metamodels of respective source and target languages; 2) populating the connector metamodels with metamodel data of each of

the respective source and target languages; and 3) converting the source language to the target language.”

The Examiner acknowledges that Devine fails to teach or suggest these features of claim 1 (Office Action: pages 10-11). The Examiner alleges, however, that Yee makes up for the acknowledged deficiencies of Devine (Office Action: page 11; *citing, e.g.*, Yee: col. 21, lines 1-11 and 43-55).

To the contrary, Yee describes that a user creates a mapping definition whereby the user identifies the message definitions that define the messages the user wants to use as input and to produce as outputs (Yee: col. 21, lines 1-11). In Yee, the user then creates a sequence of steps that define when to read input data, how to transform the input data, how to map the input data from input message definitions to output message definitions, and when to write the transformed data to actual output messages (*Id.*).

In this manner, the user can transform input data in any way necessary to create the output messages the user needs (Yee: col. 21, lines 12-24). For example, a user can create a transformation expression that specifies selecting only certain characters from a message item, or padding a message item with spaces to make it the right length for the corresponding data field in the target application (*Id.*).

After the user has created the mapping definition, the user can then assign the mapping definition to one or more transformers (Yee: col. 21, lines 38-48). In Yee, a transformer is created by the user to implement the user-created mapping definitions (*Id.*). In particular, when

the user creates the transformer, the user specifies objects to use as sources of the primary input message and the objects that are to be targets for the output messages (*Id.*). The user also specifies the objects that are to reply to requests for supporting inputs (*Id.*).

Thereafter, when the transformer receives a primary input message from a source object, the transformer runs the sequence of steps defined in the mapping definition that make up the transformation process (Yee: col. 21, lines 49-55). The transformer reads the primary and supporting input messages, transforms the input data, writes the transformed data to output messages, and sends the output messages to the target objects (*Id.*).

It is respectfully submitted that the user-created mapping definitions, message definitions and transformers, as described in Yee, each fails to teach or suggest the connector recited in claim 1.

For example, the user-specified transformation of input data into a form needed for output data (*see, e.g.,* Yee: col. 21, lines 13-18) does not correspond to a connector converting an application request from a first language into a second language, let alone a connector “converting the application request from the first language of the first end user application to a second language of a form for the transaction message formatter running on the application server” and “converting the response to the application request from the second language of the transaction message formatter running on the application server to the first language of the first end user application,” as recited in claim 1.

Furthermore, the transformation of input data into a form needed for output data (*see, e.g., Yee: col. 21, lines 13-18*) does not correspond to a connector that invokes connector metamodels of the source and target languages, populates the connector metamodels with metamodel data of each of the source and target languages, and converts the source language to the target language, as recited in claim 1.

For at least these exemplary reasons, claim 1 is not rendered obvious by the proposed combination of Devine and Yee. Claims 5 and 8 recite features similar to claim 1 and, thus, claims 5 and 8 are patentable over the proposed combination of Devine and Yee based on a rationale analogous to that set forth above for claim 1. Consequently, claims 2-4, 6-7 and 9-10 are patentable over the proposed combination of Devine and Yee at least by virtue of their dependency.

B. Claims 11-12

As noted above, claims 11-12 stand rejected under § 103(a) as allegedly being unpatentable over Yee in view of Mellen-Garnett.

Claim 11 is directed to a program product comprising a computer-readable storage medium having invocation metamodel data, application domain interface metamodel data, language metamodel data and transaction message formatter metamodel data stored thereon. In claim 11, the transaction message formatter metamodel data includes a message descriptor, logical page, password, segment, message field, device descriptor, device type, device division, device page and device field.

Additionally, the computer-readable storage medium of claim 11 stores computer instructions for building a metamodel metadata repository of source and target language metamodel data. The Examiner alleges that Yee teaches these features of claim 11 by describing, *inter alia*, a repository service 135 (Office Action: page 17; *citing* Yee: col. 15, lines 55-58).

In Yee, an enterprise application integration (EAI) system 100 includes a repository service 140 (Yee: Fig. 2). The repository service 140 comprises a relational database and an interface to the relational database (Yee: col. 15, lines 55-58). The relational database contains the specifications for the EAI system 100, meta-data and message broker service rules (*Id.*).

Yee (like Mellen-Garnett), however, fails to teach or suggest instructions for building any metamodel metadata repository, let alone building a metamodel metadata repository that includes metamodel metadata for both a source language and a target language.

Furthermore, Yee (like Mellen-Garnett) fails to disclose or suggest storing “transaction message formatter metamodel data,” let alone transaction message formatter metamodel data that “includes a message descriptor, logical page, password, segment, message field, device descriptor, device type, device division, device page and device field,” as recited in claim 11.

For at least the above reasons, it is respectfully submitted that claim 11 is not rendered obvious by the proposed combination of Yee and Mellen-Garnett. Consequently, claim 12 is patentable over the proposed combination of Yee and Mellen-Garnett at least by virtue of its dependency.

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VI. New Claims 13-17

Applicant adds new claims 13-17. The subject matter of claims 13-17 is set forth in Applicant's disclosure and, thus, does not constitute new matter. It is respectfully submitted that new claims 13-17 are patentable at least by virtue of their dependency.

VII. Formal Matters

Information Disclosure Statement

The Examiner provides a signed and initialed copy of the Form PTO-1449 submitted with Applicant's IDS filed on January 30, 2002, thereby indicating consideration of the references cited therein.

Specification

Applicant amends the specification to update the information on the related applications cited in the specification.

Claims

Applicant amends claims 7 and 10 to correct minor typographical errors, thereby overcoming the Examiner's objection to these claims.


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VIII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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